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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,569	11/06/2006	Tony Richards	1009-003	6482

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EXAMINER	
DANIEL JR, WILLIE J	

ART UNIT	PAPER NUMBER
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/568,569	RICHARDS ET AL.	
	Examiner	Art Unit	
	WILLIE J. DANIEL JR	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 August 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to applicant's amendment filed on 03 August 2010. **Claims 1-23** are now pending in the present application and **claims 24-35** are canceled. This office action is made **Final**.

Claim Rejections - 35 USC § 112

2. The 112 rejections applied to the claims are withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Seal (US 6,396,438 B1)** further supported by **Duret (6,667,612 B2)**.

Regarding **claim 1**, Seal discloses a radio frequency receiver for use in a proximity detecting system (see col. 5, lines 58-60; abstract; Figs. 1 & 20), the radio frequency receiver comprising

at least one antenna coil (e.g., sensors) operable to receive radio frequency signals (see col. 5, lines 1-10,18-22; Figs. 1-2 & 4), where the system uses sensors for receiving and transmitting;

tunable receiver circuitry arranged in operative association with the antenna coil and being arranged to modify the frequency at which radio signals are received by the radio frequency receiver (see col. 5, lines 32-39; Fig. 2);

a signal processor (e.g., communications processor 1406) arranged to amplify and filter signals received by the radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14); and

a processing system arranged to receive radio signals amplified and filtered by the signal processor (e.g., 1406) so as to evaluate a signal strength associated with each said antenna coil, the processing system being arranged to evaluate a distance between a radio frequency transmitter and the radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by at least one antenna coil (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3);

wherein the radio frequency receiver is operable to receive and process radio signals of frequencies between 100kHz and 10MHz (see col. 5, lines 1-10; col. 10, lines 26-28). Seal clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) 100kHz was well known in the art, as taught by Duret.

As further support in the same field of endeavor, Duret discloses the feature(s) 100kHz (see col. 3, lines 22-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Seal as further supported by Duret to

have the feature(s) 100kHz, in order to provide a system for positioning a mobile object, as taught by Duret (see col. 2, lines 2-7).

Regarding **claim 2**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 1), in addition Seal further discloses a radio frequency receiver according to claim 1, including three antenna coils, wherein the tunable receiver circuitry is selectively arranged to cooperate with each said antenna coil (see col. 5, lines 32-39; Figs. 1-2, 4, & 20).

Regarding **claim 3**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 2), in addition Seal further discloses a radio frequency receiver according to claim 2, wherein each antenna coil is positioned along an axis in a direction extending substantially perpendicular to that occupied by the other antenna coils (see col. 5, lines 21-22,32-37; col. 6, lines 8-12; Figs.1-2, 4, & 20), where the system can use other angles or orientation. As a note, Duret at the least discloses the feature(s) wherein each antenna coil is positioned along an axis in a direction extending substantially perpendicular to that occupied by the other antenna coils (see col. 7, lines 30-35).

Regarding **claim 4**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 2), in addition Seal further discloses a radio frequency receiver according to claim 2, wherein, in a first operating condition, the receiver circuitry is arranged to select each of the three antenna coils in accordance with a specified selection procedure (see col. 15, lines 15-18,53-57; abstract).

Regarding **claim 5**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 4), in addition Seal further discloses a radio frequency

receiver according to claim 4, wherein the selection procedure comprises selecting each of the antenna coils sequentially (see col. 15, lines 15-18,53-57; abstract).

Regarding **claim 6**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 2), in addition Seal further discloses a radio frequency receiver according to claim 2 to claim 4, wherein the processing system is arranged to evaluate a distance between a the radio frequency transmitter and the radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by each antenna coil (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3).

Regarding **claim 7**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 4), in addition Seal further discloses a radio frequency receiver according to claim 4, wherein the receiver circuitry is arranged to operate in a second operating condition wherein none of the antenna coils is selected and the signal processor is arranged to amplify and filter radio signals in the second operating condition (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 8**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 7), in addition Seal further discloses a radio frequency receiver according to claim 7, wherein the processing system is arranged to use the filtered and amplified signals corresponding to the second operating condition to modify the signal strengths evaluated in the first operating condition (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 9**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 8), in addition Seal further discloses a radio frequency

receiver according to claim 8, wherein the signal processor is arranged to identify, within a time period, a sequence of frequencies in the amplified and filtered radio signals (see col. 10, lines 42-46; col. 5, lines 37-39; col. 6, lines 21-24; Fig. 14).

Regarding **claim 10**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 9), in addition Seal further discloses a radio frequency receiver according to claim 9, wherein the signal processor is adapted to identify correlation between filtered radio signals in order to identify a sequence of frequencies in the received signals (see col. 10, lines 42-46; col. 6, lines 21-24; Fig. 14).

Regarding **claim 11**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 8), in addition Seal further discloses a radio frequency receiver according to claim 8, wherein the signal processor is arranged to identify a modulation pattern within the received radio signals and to compare the identified modulation pattern with a specified modulation pattern (see col. 10, lines 42-46; col. 6, lines 21-24,34-43; Fig. 14).

Regarding **claim 12**, Seal discloses a proximity detecting apparatus comprising a low radio frequency receiver and a low radio frequency transmitter (see col. 5, lines 58-60; abstract; Figs. 1 & 20), the low radio frequency receiver comprising:

at least one antenna coil (e.g., sensors) operable to receive radio frequency signals (see col. 5, lines 1-10,18-22; Figs. 1-2 & 4), where the system uses sensors for receiving and transmitting;

tunable receiver circuitry arranged in operative association with the antenna coil and being arranged to modify the frequency at which radio signals are received by the low radio frequency receiver (see col. 5, lines 32-39; Fig. 2);

a signal processor (e.g., communications processor 1406) arranged to amplify and filter signals received by the low radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14); and

a processing system arranged to receive radio signals amplified and filtered by the signal processor (e.g., 1406) so as to evaluate a signal strength associated with each said antenna coil, the processing system being arranged to evaluate a distance between a radio frequency transmitter and the low radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by at least one antenna coil (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3);

wherein the low radio frequency receiver is operable to receive and process radio signals of frequencies between 100kHz and 10MHz (see col. 5, lines 1-10; col. 10, lines 26-28), and

wherein the low radio frequency transmitter is arranged to transmit radio signals of frequencies less than 10 MHz, and wherein the low radio frequency receiver is arranged to receive and process signals from said low radio frequency transmitter so as to generate data indicative of a distance between said radio frequency transmitter and low radio frequency receiver (see col. 5, lines 1-10,18-22,39-42; col. 6, lines 21-24,34-43; Figs. 1-2, 4, & 20). Seal clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) 100kHz was well known in the art, as taught by Duret.

As further support in the same field of endeavor, Duret discloses the feature(s) 100kHz (see col. 3, lines 22-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Seal as further supported by Duret to have the feature(s) 100kHz, in order to provide a system for positioning a mobile object, as taught by Duret (see col. 2, lines 2-7).

Regarding **claim 13**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 12), in addition Seal further discloses a proximity detecting apparatus according to claim 12, including a further said low radio frequency transmitter, wherein said receiver antenna coils are arranged to receive first signals from the low radio frequency transmitter and second signals from said further low radio frequency transmitter (see col. 5, lines 1-10,18-22,39-42; col. 6, lines 21-24,34-43; Figs. 1-2, 4, & 20).

Regarding **claim 14**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 13), in addition Seal further discloses a proximity detecting apparatus according to claim 13, wherein the processing system is arranged to access a function operable to output data indicative of a position in response to input indicative of signal strength received by the antenna coils, the processing system being arranged to input first and second signals to said function and to combine output indicative of first and second positions corresponding thereto so as to identify a position of the low radio frequency receiver (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3).

Regarding **claim 15**, Seal discloses a proximity detecting apparatus comprising first and second low radio frequency receivers and a low radio frequency transmitter arranged to

transmit radio signals of frequencies less than 10 MHz (see col. 5, lines 58-60; abstract; Figs. 1 & 20), wherein each of said first and second low radio frequency receivers comprises:

at least one antenna coil (e.g., sensors) operable to receive radio frequency signals (see col. 5, lines 1-10,18-22; Figs. 1-2 & 4), where the system uses sensors for receiving and transmitting;

tunable receiver circuitry arranged in operative association with the antenna coil and being arranged to modify the frequency at which radio signals are received by the low radio frequency receiver (see col. 5, lines 32-39; Fig. 2);

a signal processor (e.g., communications processor 1406) arranged to amplify and filter signals received by the low radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14); and

a processing system arranged to receive radio signals amplified and filtered by the signal processor (e.g., 1406) so as to evaluate a signal strength associated with each said antenna coil, the processing system being arranged to evaluate a distance between a radio frequency transmitter and the low radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by at least one antenna coil (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3);

wherein the low radio frequency receiver is operable to receive and process radio signals of frequencies between 100kHz and 10MHz (see col. 5, lines 1-10; col. 10, lines 26-28), and

wherein each of the first and second low radio frequency receivers is arranged to receive and process signals transmitted from said radio frequency transmitter and wherein the proximity detecting apparatus comprises means arranged to combine signals processed by

said first and second radio frequency receivers so as to generate data indicative of a position of said radio frequency transmitter relative to said first and second radio frequency receivers (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 26-28; Fig. 3). Seal clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) 100kHz was well known in the art, as taught by Duret.

As further support in the same field of endeavor, Duret discloses the feature(s) 100kHz (see col. 3, lines 22-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Seal as further supported by Duret to have the feature(s) 100kHz, in order to provide a system for positioning a mobile object, as taught by Duret (see col. 2, lines 2-7).

Regarding **claim 16**, Seal discloses a low frequency radio receiver for use in a proximity detecting system (see col. 5, lines 58-60; abstract; Figs. 1 & 20), the low radio frequency receiver comprising

three antenna coils each being operable to receive radio frequency signals at frequencies less than 10 MHz (see col. 5, lines 1-10,18-22; col. 10, lines 26-28; Figs. 1-2 & 4), where the system uses sensors for receiving and transmitting;

tunable receiver circuitry arranged in operative association with each coil and being arranged to modify the frequency at which signals are received by the low radio frequency receiver (see col. 5, lines 32-39; Fig. 2);

signal processing means arranged to amplify and filter signals received by the low radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14); and

frequency sequence identifying means arranged to identify, within a time period, a sequence of frequencies in the amplified and filtered signals (see col. 10, lines 42-46; col. 5, lines 37-39; col. 6, lines 21-24; Fig. 14). Seal clearly discloses the feature(s) indicated above as evidenced by the fact that one of ordinary skill in the art would clearly recognize. However, the examiner maintains that the feature(s) frequencies less than 10 MHz was well known in the art, as taught by Duret.

As further support in the same field of endeavor, Duret discloses the feature(s) frequencies less than 10 MHz (see col. 3, lines 22-27).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Seal as further supported by Duret to have the feature(s) frequencies less than 10 MHz, in order to provide a system for positioning a mobile object, as taught by Duret (see col. 2, lines 2-7).

Regarding **claim 17**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 16), in addition Seal further discloses a low frequency radio receiver according to claim 16, wherein, in a first operating condition, the receiver circuitry is arranged to select each of the three antenna coils in accordance with a specified selection procedure (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 18**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 17), in addition Seal further discloses a low frequency

radio receiver according to claim 17, wherein the selection procedure comprises selecting each of the antenna coils sequentially (see col. 15, lines 15-18,53-57; abstract).

Regarding **claim 19**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 16), in addition Seal further discloses a low frequency radio receiver according to claim 16, wherein the frequency sequence identifying means is arranged to correlate the filtered signals associated with at least one antenna coil in order to identify said sequence of frequencies (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 20**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 1), in addition Seal further discloses a low frequency radio receiver according to claim 17, wherein, for each frequency in the sequence, the receiver circuitry is arranged to operate in a second operating condition wherein none of the antenna coils is selected and the signal processor is arranged to amplify and filter signals corresponding to the second operating condition (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 21**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 20), in addition Seal further discloses a low frequency radio receiver according to claim 20, wherein the processing system is arranged to use the filtered and amplified signals corresponding to the second operating condition to modify the signal strengths corresponding to the first operating condition (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 22**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 16), in addition Seal further discloses a low frequency radio receiver according to claim 16, including a processing system arranged to process filtered signals corresponding to the three antenna coils in accordance with a predetermined location determining algorithm so as to identify the position of a source of said radio signals received by the low radio frequency receiver (see col. 5, lines 39-50; col. 6, lines 21-24; col. 10, lines 42-46; Figs. 3-4).

Regarding **claim 23**, the combination of Seal and Duret discloses every limitation claimed, as applied above (see claim 16), in addition Seal further discloses a low frequency radio receiver according to claim 16, wherein the processing system is integral with the low radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14).

Response to Arguments

4. Applicant's arguments with respect to claims 12-23 have been considered but are moot in view of the new ground(s) of rejection necessitated by the amended language and/or new limitations.

In response to applicant's arguments, the Examiner respectfully disagrees as the applied reference(s) provide more than adequate support and to further clarify (see the above claims for relevant citations and comments in this section).

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Regarding applicant's argument (see non-compliant response filed 22 July 2010) of claim 1 in the par. bridging pgs. 11-12, "...novel over...a signal processor arranged to amplify and filter signals received by the radio frequency receiver; a processing system arranged to receive radio signals amplified and filtered by the signal processor so as to evaluate a signal strength associated with each said antenna coil, the processing system being arranged to evaluate a distance between a radio frequency transmitter and the radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by the at least one antenna coil...", the Examiner respectfully disagrees. Applicant has failed to interpret and appreciate the combined teachings of well-known prior art Seal and Duret that clearly discloses the claimed feature(s) as would be clearly recognized by one of ordinary skill in the art. In particular, Seal discloses the language as related to the claimed feature(s)

a signal processor (e.g., communications processor 1406) arranged to amplify and filter signals received by the radio frequency receiver (see col. 6, lines 21-24; col. 10, lines 42-44; Fig. 14); and

a processing system arranged to receive radio signals amplified and filtered by the signal processor (e.g., 1406) so as to evaluate a signal strength associated with each said antenna coil, the processing system being arranged to evaluate a distance between a radio frequency transmitter and the radio frequency receiver on the basis of evaluated signal strengths associated with radio signals received by at least one antenna coil { (see col. 5, lines 39-50; col. 6, lines 21-24; Fig. 3), where the system utilizes relative signal strength for providing position information }. As further support in the same field of endeavor, Duret discloses the language as related to the claimed feature(s) 100kHz (see col. 3, lines 22-27). Therefore, the combination(s) of the reference(s) Seal and Duret as addressed above more than adequately meets the claim limitations.

6. Regarding applicant's argument(s) of claims 2-11, the claims are addressed for the same reasons as set forth above and as applied above in each claim rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Cannon et al. (US 2001/0029187 A1) discloses adaptive paging signal in cordless telephone. Cannon at the least further discloses …Traditionally, DSPs in cordless telephones determine the **received signal strength** of the signals between the base

and handset to determine whether to switch to a different communication channel for the RF link. Thus, those of skill in the art are familiar with this measure and are familiar with the fact that it provides an estimate of channel quality. Further, those of skill in the art are familiar with an **axiom** by which the **signal strength** tends to be indirectly **related** to the **distance** between the base unit and the handset. Thus, **signal strength** is a **good estimate** of this **distance**... (see Cannon - pg. 2, [0022, lines 3-13]).

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIE J. DANIEL JR whose telephone number is (571)272-7907. The examiner can normally be reached on 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/WJD,Jr/

WJD,Jr
08 October 2010

/Charles N. Appiah/
Supervisory Patent Examiner, Art Unit 2617